CLAIMS

What is claimed is:

5   1. A computer-implemented method for compiling ASL (ACPI Source Language) code into AML (ACPI machine language) code, comprising:

accessing an ASL program;

executing a preprocessor to process the ASL program and to insert support for at least one non-native programming construct; and

10   processing the ASL program using an ASL compiler to compile the ASL program into a resulting AML program.

2. The computer implemented method of claim 1, wherein the non-native programming construct is included in the ASL program and is tolerated by the ASL

15   compiler during the compile of the ASL program into the resulting AML program.

3. The computer implemented method of claim 1, wherein the non-native programming construct comprises object names having more than four characters.

20   4. The computer implemented method of claim 1, wherein the non-native programming construct comprises at least one shared C header file configured for sharing between the ASL program and a firmware program.

5. The computer implemented method of claim 1, wherein the non-native

25   programming construct comprises code configured to change at compile-time to support a platform variance.

6. The computer implemented method of claim 1, wherein the non-native programming construct comprises at least one C header file.

30

7. The computer implemented method of claim 1, wherein the non-native programming construct comprises a Zeta-string variable.

8. A compiling method for compiling ASL (ACPI Source Language) code into

35   AML (ACPI machine language) code, comprising:

accessing an ASL program;

executing a preprocessor to process the ASL program and to insert support for at least one non-native programming construct; and

generating an input ASL program by using the preprocessor, the input ASL

13

program generated in accordance with the ASL program and the at least one non-native programming construct;

processing the input ASL program using an ASL compiler to compile the input ASL program into a resulting AML program.

9. The compiling method of claim 8 wherein the preprocessor generates the input ASL program in accordance with preprocessor instructions contained within the non-native programming construct.

10. The compiling method of claim 9 wherein the generation of the input ASL program by the preprocessor is controlled by conditions specified by the instructions.

11. The compiling method of Claim 10 wherein the processing of the input ASL program by the ASL compiler yields the resulting AML program that functions in accordance with the conditions specified by the instructions.

12. The compiling method of claim 11, wherein the non-native programming construct comprises object names having more than four characters.

13. The compiling method of claim 11, wherein the non-native programming construct comprises at least one shared C header file configured for sharing between the ASL program and a firmware program.

14. The compiling method of claim 11, wherein the non-native programming construct comprises code configured to change at compile-time to support a platform variance.

15. The compiling method of claim 11, wherein the non-native programming construct comprises at least one C header file.

16. The compiling method of claim 11, wherein the non-native programming construct comprises a Zeta-string variable.

17. A computer-readable medium embodying instructions that cause a computer system to perform a method for compiling ASL (ACPI Source Language) code into AML (ACPI machine language) code, said method comprising:

accessing an ASL program;

executing a preprocessor to process the ASL program and to insert support for at least one non-native programming construct; and

14

processing the ASL program using an ASL compiler to compile the ASL program into a resulting AML program.

18. The computer-readable medium of claim 17, wherein the non-native programming construct is included in the ASL program and is tolerated by the ASL compiler during the compile of the ASL program into the resulting AML program.

19. The computer-readable medium of claim 17, wherein the preprocessor generates the ASL program in accordance with preprocessor instructions contained within the non-native programming construct.

20. The computer-readable medium of claim 19, wherein the generation of the ASL program by the preprocessor is controlled by conditions specified by the instructions.

21. A system for compiling ASL (ACPI Source Language) code into AML (ACPI machine language) code, comprising:
    means for accessing an ASL program;
    means for executing a preprocessor to process the ASL program and to insert support for at least one non-native programming construct; and
    means for processing the ASL program using an ASL compiler to compile the ASL program into a resulting AML program.

22. The system of claim 21, wherein the non-native programming construct is included in the ASL program and is tolerated by the ASL compiler during the compile of the ASL program into the resulting AML program.